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### **REMARKS**

This response is intended as a full and complete response to the final Office Action mailed October 6, 2005. In the Office Action, the Examiner notes that claims 1, 3-10, 14, 16, 18, 19, 23-32, 34-43 and 45-65 are pending and rejected. By this response, Applicants have amended claims 1, 14, 24, 30, 37, 40, 42, 52, 55, 56 and 60 and canceled claims 10, 16, 25-27, 35-36, 38-39, 51, 57 and 65.

Claim 1 has been amended to include the limitations of claim 10. Claim 14 has been amended to include the limitations of claim 16. Claim 24 has been amended to include the limitations of claims 25-27. Claim 30 has been amended to include the limitations of claims 35-36 and 38-39. Claims 37 and 40 have been amended for proper dependency. Claim 42 has been amended to include the limitations of 51 and 57. Claims 52, 55 and 56 have been amended for proper dependency. Claim 60 has been amended to include the limitation of claim 65. No new matter has been added. No new issues are raised. The amendment places the application in better form for appeal by materially reducing and simplifying the issues for appeal. Applicants respectfully request that the Examiner enter these amendments.

In view of both the amendments presented above and the following discussion, Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §103. Further, Applicants submit that all of the claims now pending comply with the written description requirement of 35 U.S.C. §112. Thus, Applicants believe that all of the pending claims are now in allowable form.

It is to be understood that Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

### **PRIORITY**

The Examiner states that "[I]t is unclear how the instant application is a divisional 07/991,074 in that the instant application adds disclosure not presented in the

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07/991,074 (parent) application. Accordingly, it appears that the instant application is a continuation-in-part of 07/991,074 (and not a divisional)."

Applicant has amended the specification to show that the present application is a CIP of 07/991,074 now U.S. Patent 5,990,927, and a divisional of 08/160,194 which is a CIP of 07/991,074 now U.S. Patent 5,990,927.

### **REJECTIONS**

#### **35 U.S.C. §112**

##### **Claim 64**

The Examiner has rejected claim 64 under 35 U.S.C. §112, ¶1, as failing to comply with the written description requirement. In particular, regarding claim 64, the Examiner finds that "there is no support in the specification as originally filed for 'said encrypted data stream being coupled to an upgrade decryption module.'" The Applicants respectfully disagree.

Claim 64 is directed towards a 2<sup>nd</sup> upgrade allowing the client to listen to digital audio program using the hardware upgrade comprising an upgrade decryption module. An embodiment is illustrated by a block diagram of FIG. 12b. In 12b and corresponding detailed description in the specification (page 35, line 16 to page 36, line 3), it clearly discloses the upgrade decryption module 140. Also, page 35, lines 25-29 discloses the embodiment of daisy chaining a plurality of upgrades. The disclosure of the module 140 inherently implies that the digital audio program is encrypted entering that module and is being decrypted by that module. Therefore, claim 64 does comply with the written description requirement and is patentable thereunder.

#### **35 U.S.C. §103**

##### **Claims 1, 3-10, 14, 16, 18-19, and 23-29**

The Examiner has rejected claims 1, 3-10, 14, 16, 18-19, and 23-29 as being obvious under 35 U.S.C. §103 as being unpatentable over Graczyk in view of Banker, Palazzi, Granger, and Florin. Applicants respectfully traverse the rejections.

Applicants' independent claim 1 recites:

1. A hardware upgrade for a set top terminal for use with a

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television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus, the hardware upgrade comprising:

- an interface to the set top terminal for receiving and processing subscriber input;
- a modem connected to the interface capable of communicating with one or more headends, wherein the set top terminal receives television program signals based on the subscriber input; and
- a microprocessor connected between the interface and the modem, wherein the hardware upgrade is a card insertable into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in local storage, and the interface to the terminal comprises:
  - interactive software stored in memory of said hardware upgrade to provide enhanced functional capabilities for the set top terminal; and
  - processing circuitry to process said subscriber inputs associated with said interactive software.

Graczyk discloses modem (44) having a digital signal processor (102) in communications with ROM (108) which includes firmware that may act with the host software to move a block of compressed data from memory to generate an outgoing message and then record an incoming message (col. 7, lines 9-18; 58-66, col. 8, lines 1-18). Specifically, Graczyk is silent on hardware upgrade providing interactive software for enhanced functional capabilities and processing subscriber inputs. Moreover, merely storing data such as Graczyk does not enhance any functional capabilities. It merely improves the performance of the modem. Thus, Graczyk does not disclose, teach or suggest "interactive software stored in memory of said hardware upgrade to provide enhanced functional capabilities for the set top terminal; and processing circuitry to process said subscriber inputs associated with said interactive software."

Banker, Palazzi, Granger, and Florin also do not disclose "interactive software stored in memory of said hardware upgrade to provide enhanced functional capabilities for the set top terminal; and processing circuitry to process said subscriber inputs associated with said interactive software."

As such, Applicants submit that claim 1 is not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 3-9 depend, either directly or indirectly, from independent claim 1, and recite additional

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features thereof. As such, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

Applicants' independent claim 14 recites:

14. A set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:  
a receiver adapted to receive programs; and  
a first hardware upgrade comprising:  
an interface to the set top terminal for receiving and processing subscriber input;  
a modem connected to the interface capable of communicating with one or more headends, wherein the set top terminal receives television program signals based on the subscriber input; and  
a microprocessor connected between the interface and the modem, wherein the first hardware upgrade is a card inserted into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in a local storage and the terminal has an expansion card slot, and wherein the interface comprises at least one card connector adapted for use with the expansion card slot.

Graczyk and Banker do not disclose "wherein the first hardware upgrade is a card inserted into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in a local storage and the terminal has an expansion card slot, and wherein the interface comprises at least one card connector adapted for use with the expansion card slot." Specifically, Graczyk merely shows in FIG. 45 that bracket assembly could be used to include a modem board. Graczyk is silent that the modem of the expansion card in the card slot of the terminal receives data from the headend.

Banker, Palazzi, Granger, and Florin also do not disclose "wherein the first hardware upgrade is a card inserted into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in a local storage and the terminal has an

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expansion card slot, and wherein the interface comprises at least one card connector adapted for use with the expansion card slot.”

As such, Applicants submit that claim 14 is not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 18-19 and 23 depend, either directly or indirectly, from independent claim 14 and recite additional features thereof. As such, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

Applicants' independent claim 24 recites:

24. A system comprising:  
a television program delivery system adapted to deliver television program signals; and  
a set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:  
a receiver adapted to receive at least some of the television program signals; and  
a hardware upgrade comprising:  
an interface to the set top terminal for receiving and processing subscriber input;  
a modem connected to the interface capable of communicating with one or more headends, wherein the set top terminal receives the television program signals based on the subscriber input; and  
a microprocessor connected between the interface and the modem, wherein the hardware upgrade is a card inserted into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in a local storage  
wherein the television program delivery system is a cable television program delivery system comprises an operations center, the operations center transmitting one or more of the programs to the terminal wherein a particular one of the one or more headends transmitting one or more of the programs to the terminal.

Operations center for transmitting programs to terminals is notoriously old and well known as asserted by the Examiner. However, a hardware upgrade including a modem capable of communicating with headends at an operations center is not notoriously old and well known. Graczyk, Banker, Palazzi, Granger, and Florin do not

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disclose, teach or suggest any hardware upgrade for a set top terminal wherein the upgrade modem communicates with headend of an operations center.

As such, Applicants submit that claim 24 is not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 28-29 depend, either directly or indirectly, from independent claims 1, 14, and 24, and recite additional features thereof. As such, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

**Claims 30-42, 45-51, 55, 56 and 58-59**

The Examiner has rejected claims 30-42, 45-51, 55, 56 and 58-59 as being obvious under 35 U.S.C. §103 over Palazzi in view of Banker, Florin and Banker. Claim 33 has already been canceled without prejudice in previous responses, and it is unclear why Banker is currently listed twice. Applicants respectfully traverse the rejection.

Applicants' independent claim 30 recites:

30. A television terminal having a microprocessor and microprocessor instructions for prompting generation of menus, the television terminal comprising:

a television program receiver;

a hardware upgrade adding a data modulation and demodulation function to the television terminal comprising:

an interface to the television terminal for receiving and processing subscriber input;

a modem capable of communicating with one or more headends, wherein the television terminal receives television program signals based on the subscriber input; and

a microprocessor connected between the interface and the modem, wherein the modem downloads data from the one or more headends to a local storage, the modem is capable of communicating with an interactive service and an on-line database wherein the interactive service and the on-line database are outside of the television program delivery system; and

an output connected to the receiver and the modem, wherein the output accepts the television program signals from the receiver and data signals from the modem.

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Palazzi, Banker, and Florin do not disclose, teach or suggest any upgrade modem for a set top terminal that is able to download data from at least one headend of a television program delivery system and also able to communicate with interactive service and on-line database outside of the television program delivery system. Furthermore, Claims 35-36 and 38-39 have been canceled.

As such, Applicants submit that claim 30 is not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Claims 31-32, 34, 37, 40-41 depend, either directly or indirectly, from independent claim 30 and recite additional features thereof. As such, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

Applicants' independent claim 42 recites:

42. A method for delivering television programs through a television program delivery system with menu selection of programs, comprising:

- receiving a television program from one or more headends;
- receiving subscriber input through an interface within a set top terminal, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus;
- communicating through a modem with the one or more headends using a hardware upgrade inserted into the set top terminal, the hardware upgrade adding a data modulation and demodulation function to the set top terminal, and the communicating step comprising:
  - transmitting data based on the subscriber input;
  - receiving data from the one or more headends; and
  - downloading data from the one or more headends to a local storage using the hardware upgrade and the modem; and
- displaying the television program and/or information based on the received data;
- providing a second upgrade to said set top terminal for storing digital data on a storage device, wherein the received data comprises information concerning the television program, and
- monitoring the information concerning the television program; and
- retrieving the stored digital data, in response to the monitoring step.

Palazzi, Banker, and Florin do not disclose, teach or suggest providing a second upgrade to the set top terminal for storage and monitoring the information from the

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television program to retrieve the stored data. Moreover, the addition of the Vogel (US 5,253,066) does not bridge the substantial gap between Palazzi, Banker, and Florin and the present invention. Vogel discloses receiving program schedule data which is stored in memory. When the user request the program schedule, the microprocessor retrieves the relevant data (see column 3, line 2 to column 4, line 5). Vogel does not disclose, teach or suggest a second upgrade including monitoring the information from data received from the headend for retrieving a store data as claimed. Palazzi, Banker, Florin and Vogel do not disclose, teach or suggest a second upgrade to said set top terminal for storing digital data on a storage device, wherein the received data comprises information concerning the television program, monitoring the information concerning the television program; and retrieving the stored digital data, in response to the monitoring step

As such, Applicants submit that claim 42 is not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 45-50, 55, and 58-59 depend, either directly or indirectly, from independent claim 42, and recite additional features thereof. Thus, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

#### **Claims 43-44 and 57**

The Examiner has rejected claims 43-44 and 57 as being obvious under 35 U.S.C. §103 over Banker, Palazzi and Florin in further view of Vogel (of record). Applicants respectfully traverse the rejection.

Claims 44 and 57 has been canceled. Claim 43 depend directly from independent claim 42, and recite additional features thereof. As stated above, Vogel does not disclose, teach or suggest a second upgrade including monitoring the information from data received from the headend for retrieving a store data as claimed.

As such, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and

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are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

#### **Claims 52-54**

The Examiner has rejected claims 52-54 under 35 U.S.C. §103(a) as being unpatentable over Banker, Palazzi, and Florin in view of Sprague (of record).

Applicants respectfully traverse the Examiner's rejection.

Examiner asserts that Sprague discloses CD-Rom as memory storage device. Moreover, the addition of Sprague does not bridge the substantial gap between Palazzi, Banker, and Florin and the present invention. Sprague also does not disclose, teach or suggest a second upgrade including monitoring the information from data received from the headend for retrieving a store data as claimed.

Because claims 52-54 depend, either directly or indirectly, from independent claim 42, and recite additional features thereof. As such, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

#### **Claims 60, 63 and 64**

The Examiner has rejected claims 60, 63 and 64 as being obvious under 35 U.S.C. §103 over Granger in view of Wachob (U.S. Patent 5,234,494) and Florin.

Applicants respectfully traverse the rejections.

Applicants' independent claim 60 recites:

60. Apparatus for upgrading a capability of a set top terminal (STT), said STT having circuitry adapted to receive a data stream including a plurality of compressed television program signals, decompress a compressed program signal and provide a corresponding output signal adapted for use by a display device, said apparatus comprising:

a STT interface, for enabling communication with said STT;  
a modem for providing on-line communications with a content provider, said modem being a card insertable into said STT to add a data modulation and demodulation function to said STT, wherein said STT includes a first processor for controlling said circuitry, and

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an upgrade processor, for communicating with said first processor via said STT interface, said upgrade processor controlling said upgrade modem.

Granger, Wachob and Florin do not disclose teach or suggest a STT including a first processor and an upgrade processor for communicating with the first processor and upgrade modem.

As such, Applicants submit that claim 60 is not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 63 and 64 depend, either directly or indirectly, from independent claim 60, and recite additional features thereof. As such, and for at least the same reasons discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

#### Claims 61 and 62

The Examiner has rejected claims 61 and 62 under 35 U.S.C. §103(a) as being unpatentable over Granger, Wachob and Florin in view of Pond (U.S. Patent 5,329,590). Applicants respectfully traverse the Examiner's rejection.

Examiner asserts that Pond teaches sending billing information and programming events. Moreover, the addition of Pond does not bridge the substantial gap between Granger, Wachob, and Florin and the present invention. Pond also does not disclose teach or suggest a STT including a first processor and an upgrade processor for communicating with the first processor and upgrade modem.

Claims 61 and 62 depend, either directly or indirectly, from independent claim 60, and recite additional features thereof. As such, Applicants submit that claims 61 and 62 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

#### Claim 65

Claim 65 is not rejected in the Detailed Action, but is rejected according to the Office Action Summary. Applicants have asked in previous response for the Examiner

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to explicitly state the rejection for claim 65. Applicants have now canceled claim 65 and included the limitations of claim 65 in the amended claim 60.

### CONCLUSION

Applicants believe all the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring the issuance of an adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall, Esq. or Jasper Kwoh at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

12/6/05

E J Wall

Eamon J. Wall, Attorney  
Registration No. 39,414  
(732) 530-9404

Patterson & Sheridan, LLP  
Attorneys at Law  
595 Shrewsbury Avenue, Suite 100  
Shrewsbury, Jersey 07702